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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/662,158	09/14/2000	Alan R. Poulter	922-108	9624
23117	7590	12/06/2005	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			DUONG, FRANK	
			ART UNIT	PAPER NUMBER
			2666	

DATE MAILED: 12/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**Application No. **09/662,158**Applicant(s) **POULTER ET AL.**Examiner **Frank Duong**Art Unit **2666**

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 September 2005.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10-40 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 10 and 11 is/are allowed.  
6) ☒ Claim(s) 12, 13, 15, 16, 19, 20, 23-35, 38 and 39 is/are rejected.  
7) ☒ Claim(s) 14, 17, 18, 21, 22, 36, 37 and 40 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This Office Action is a response to communications dated 09/12/05. Claims 10-40 are pending in the application.

#### ***Claim Objections***

2. Claims 12, 17 and 23 are objected to because of the following informalities:

As per claim 12, line 4, the term "being adapted for" should change to --is--. The reason for doing so is simply because the above term has a tendency to make to subsequent limitation optional.

As per claim 17, line 2, "a identification" should read --an identification--.

As per claim 23, line 1, "claim 15" should read --claim 19--. There must be an overlooked typo in the amendment dated 11/29/04 to change its dependency.

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 12-13, 15-16, 19-20, 23-35 and 38-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Gupta et al (USP 5,113,391) (hereinafter "Gupta").

Regarding **claim 12**, in accordance with Gupta reference entirety, Gupta discloses a unit (Fig. 2) having ports (100, 102 and 104), interface units (114, 116 and 118) for maintenance and test functions (*col. 3, line 67 to col. 4, line 1*), and multiplexers (112 or Fig. 7) provide a bypass of a port to which an active communication unit is not coupled (*col. 3, lines 64-67 and thereafter*) (*note: also see Fig. 5 or 11 for connection detail*).

Regarding **claim 13**, in addition to features recited in base claim 12 (see rationales discussed above), Gupta further discloses wherein each port transmits and receives control messages so as to determine the status of a communication unit to which the respective pod is connected, the multiplexers being controlled by control logic (108) responsive to the control messages (*description of controlling circuitry and bypassing circuitry is discussed at col. 6, line 12 to col. 8, line 17 and thereafter*) (*note: also see Fig. 7 for connection detail wherein Gupta depicted control lines (to/from PPC 106 lines) are separated from data path (to/from ports B and C lines)*).

Regarding **claim 15**, in accordance with Gupta reference entirety, Gupta discloses a unit (Fig. 2) having ports (100, 102 and 104), interface units (114, 116 and 118) for maintenance and test functions (*col. 3, line 67 to col. 4, line 1*), and multiplexers (112 or Fig. 7) provide a bypass of a port to which an active communication unit is not coupled (*col. 3, lines 64-67 and thereafter*) (*note: also see Fig. 5 or 11 for connection detail and also see Fig. 7 wherein Gupta depicted control lines (to/from PPC 106 lines) are separated from data path (to/from ports B and C lines)*).

Regarding **claim 16**, in addition to features recited in base claim 15 (see rationales disclosed above), Gupta further discloses the multiplexers being controlled to bypass a port that an active communication unit is not connected (*description of controlling circuitry and bypassing circuitry is discussed at col. 6, line 12 to col. 8, line 17 and thereafter*).

Regarding **claim 19**, in accordance with Gupta reference entirety, Gupta discloses a unit (Fig. 2) having ports (100, 102 and 104), interface units (114, 116 and 118) for maintenance and test functions (*col. 3, line 67 to col. 4, line 1*), and multiplexers (112 or Fig. 7) provide a bypass of a port to which an active communication unit is not coupled (*col. 3, lines 64-67 and thereafter*) (*note: also see Fig. 5 or 11 for connection detail and also see Fig. 7 wherein Gupta depicted control lines (to/from PPC 106 lines) are separated from data path (to/from ports B and C lines)*). Moreover, Gupta also shows control logic (106, 108 and 110) for controlling the unit to bypass the port in event of port failure (*note: description of controlling circuitry and bypassing circuitry is discussed at col. 6, line 12 to col. 8, line 17 and thereafter*).

Regarding **claim 20**, in addition to features recited in base claim 19 (see rationales discussed above), Gupta also discloses wherein the connecting units (Fig. 5) provide a data path for packets in each of two directions around the ring (*see Fig. 5 for cascading connection with other ICUs*).

*(note: Examiner treats claims 23-26 to depend from claim 19 as original filed)*

Regarding **claims 23-26**, see figure 2 and the description at col. 3, line 53 to col. 4, line 2 for the details of ICU unit and figure 5 for detail connections of ICUs.

Regarding **claim 27**, in accordance with Gupta reference entirety, Gupta discloses a unit (Fig. 2) having ports (100, 102 and 104), interface units (114, 116 and 118) for maintenance and test functions (*col. 3, line 67 to col. 4, line 1*), and multiplexers (112 or Fig. 7) provide a bypass of a port to which an active communication unit is not coupled (*col. 3, lines 64-67 and thereafter*) (*note: also see Fig. 5 or 11 for connection detail and also see Fig. 7 wherein Gupta depicted control lines (to/from PPC 106 lines) are separated from data path (to/from ports B and C lines)*). Moreover, Gupta also shows control logic (106, 108 and 110) for controlling the unit to bypass the port in event of port failure (*note: description of controlling circuitry and bypassing circuitry is discussed at col. 6, line 12 to col. 8, line 17 and thereafter*).

Regarding **claim 28**, in addition to features recited in base claim 27 (see rationales discussed above), Gupta further show the multiplexer (112) for forwarding data to/from port and bypassing data to a port (*col. 3, lines 64-66 or col. 6, lines 27-33 and thereafter*).

Regarding **claim 29**, in addition to features recited in base claim 27 (see rationales discussed above), Gupta further discusses Ports B, C and A at col. 4, line 42 to col. 6, line 11 and thereafter.

Regarding **claim 30**, in addition to features recited in base claim 29 (see rationales discussed above), Gupta further shows in Fig. 5 or 11 connection details and also in Fig. 7 Gupta depicts control lines (to/from PPC 106 lines) are separated from data path (to/from ports B and C lines).

Regarding **claims 31-32**, in addition to features recited in base claim 29 (see rationales discussed above), Gupta also discusses the functions of controlling circuitry and bypassing circuitry at col. 6, line 12 to col. 8, line 17 and thereafter to include reroute data in event of failure or the controller being reprogrammed.

Regarding **claim 33**, in accordance with Gupta reference entirety, Gupta discloses a unit (Fig. 2) having ports (100, 102 and 104), interface units (114, 116 and 118) for maintenance and test functions (*col. 3, line 67 to col. 4, line 1*), and multiplexers (112 or Fig. 7) provide a bypass of a port to which an active communication unit is not coupled (*col. 3, lines 64-67 and thereafter*) (*note: also see Fig. 5 or 11 for connection detail and also see Fig. 7 wherein Gupta depicted control lines (to/from PPC 106 lines) are separated from data path (to/from ports B and C lines)*). Moreover, Gupta also shows control logic (106, 108 and 110) for controlling the unit to bypass the port in event of port failure (*note: description of controlling circuitry and bypassing circuitry is discussed at col. 6, line 12 to col. 8, line 17 and thereafter*).

Regarding **claim 34**, in addition to features recited in base claim 33 (see rationales discussed above), Gupta (see Fig. 7) shows connection details of bypass circuitry to includes multiplexers (724 and 728) for bypassing a port in the event of port failure (*col. 6, line 12 to col. 8, line 17 and thereafter*).

Regarding **claim 35**, in addition to features recited in base claim 33 (see rationales discussed above), Gupta shows control messages in TABLE I at col. 7, lines 57-64.

Regarding **claim 38**, in accordance with Gupta reference entirety, Gupta discloses a unit (Fig. 2) having ports (100, 102 and 104), interface units (114, 116 and 118) for maintenance and test functions (*col. 3, line 67 to col. 4, line 1*), and multiplexers (112 or Fig. 7) provide a bypass of a port to which an active communication unit is not coupled (*col. 3, lines 64-67 and thereafter*) (*note: also see Fig. 5 or 11 for connection detail and also see Fig. 7 wherein Gupta depicted control lines (to/from PPC 106 lines) are separated from data path (to/from ports B and C lines)*). Moreover, Gupta also shows control logic (106, 108 and 110) for controlling the unit to bypass the port in event of port failure (*note: description of controlling circuitry and bypassing circuitry is discussed at col. 6, line 12 to col. 8, line 17 and thereafter*).

Regarding **claim 39**, in addition to features recited in base claim 38 (see rationales discussed above), Gupta shows control messages in TABLE I at col. 7, lines 57-64.

#### ***Allowable Subject Matter***

4. Claims 10-11 are allowed.
5. Claims 14, 17, 18, 21, 22, 36, 37 and 40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. The following is a statement of reasons for the indication of allowable subject matter:  
The prior art of record, considered individually or in combination, fails to fairly show or suggest the claimed invention of claims 10-11 and claims 14, 17, 18, 21, 22, 36, 37 and



40 having common limitations of control messages including fields denoting an identification of a communication unit and a count of communication units which are operative to receive and forward data packets only on said communication path and altering the identification or incrementing the count at a respective receiving unit, structurally and functionally interconnected with other limitations in a manner as recited.

### ***Conclusion***

7. The prior/related art made of record and not relied upon is considered pertinent to applicant's disclosure.

O'Keeffe et al (USP 6,785,286).

Poulter et al (USP 6,428,330).

Bay Networks, Installing the BayStack 400-ST1 Cascade Module, pages 1-38, November 1998.

3COM, SuperStack 3 Switch 4400 Cascade Module User Guide, page 1-7, March 2001.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Duong whose telephone number is 571-272-3164. The examiner can normally be reached on 7:00AM-3:30PM, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Frank Duong", with a stylized, cursive script.

**FRANK DUONG**  
**PRIMARY EXAMINER**

December 2, 2005